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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/055,692	01/23/2002	Maire Mahony	843161-106	8773

7590 05/19/2004

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EXAMINER

PATEL, NIMESH G

ART UNIT PAPER NUMBER

2112

DATE MAILED: 05/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/055,692

**Applicant(s)**

MAHONY ET AL.

**Examiner**

Nimesh G Patel

**Art Unit**

2112

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>20020507</u> . | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bradley et al.('068), hereinafter referred to as Bradley, in view of Liong et al.('649), hereinafter referred to as Liong.

4. Regarding claim 1, Bradley discloses a Compact Peripheral Component Interconnect (CPCI) system comprising: a circuit board(Figure 2, 220); a front card(Figure 2, 208) coupled to a transition card(Figure 2, 207) via said circuit board; a Small Computer System Interface (SCSI) bus connected to said transition card(Column 4, Lines 28-30), said SCSI bus having a first end and a second end(It is inherent a bus has a first and second end); and an SCSI device connected to said first end of said SCSI bus(Column 4, Lines 40-44).

Bradley does not specifically disclose a period when said front card is disconnected from said CPCI system wherein said transition card provides a termination at said second end of said

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SCSI bus. However, Liong discloses a switch automatically providing termination when a SCSI card at an end is disconnected(Column 4, Lines 52-62). Therefore, it would have been obvious to combine the teachings of Liong in the system of Bradley to provide a period when said front card is disconnected from said CPCI system a transition card provides a termination at said second end of said SCSI bus since this would allow devices in a SCSI chain to be disconnected without turning power off to the rest of the system(Column 3, Lines 20-27).

5. Regarding claim 2, Liong discloses a system, wherein during normal operation when said front card is connected with said system, said front card provides the termination at said second end of said SCSI bus and said transition card does not provide the termination(Column 5, Lines 17-25).

6. Regarding claim 3, Liong discloses a system, wherein during the period when said front card is disconnected from said system, said transition card automatically provides the termination(Column 4, Lines 52-62).

7. Regarding claim 4, Liong discloses a system, wherein when said front card is reconnected with said system, said transition card automatically does not provide the termination(Column 5, Lines 17-25).

8. Regarding claim 5, Bradley discloses a CPCI system, further comprising a plurality of peripheral cards connected to said circuit board(It is inherent peripheral cards are connected in slots designed for such cards).

9. Regarding claim 6, Bradley discloses a CPCI system of claim 5, wherein said plurality of peripheral cards are in communication with said front card(It is inherent in a CPCI system for the peripheral cards to be in communication with the front card).

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10. Regarding claim 7, Bradley discloses a CPCI system, wherein each of said plurality of peripheral cards is coupled to a corresponding peripheral transition card via said circuit board(Column 4, Lines 7-10).

11. Regarding claim 8, Liong discloses a system, wherein said front card is presented with a first time-separated power domain and a second time-separated power domain(Column 4, Lines 52-56; The first domain is 5 volts and the second power domain is less than 3.55 volts).

12. Regarding claim 9, Liong discloses a system, wherein said first time-separated power domain is provided to said transition card only when said front card is coupled to said transition card(Column 4, Lines 52-56; FRU supplies 5 volts when connected and 0 volts when it is not connected).

13. Regarding claim 10, Liong discloses a system, wherein said transition card uses said first time-separated power domain to determine when to provide the termination to said second end of said SCSI bus(Column 4, Lines 52-56; the switch uses the 5 volts to determine if termination is required).

14. Regarding claim 11, Liong discloses a system, further comprising a switch for preventing said transition card from providing the termination(Figure 3, 340).

15. Regarding claim 12, Liong discloses a system1, further comprising a switch for preventing said front card from providing the termination(Figure 3, 340).

16. Regarding claim 13, Bradley discloses a CPCI System, wherein a plurality of connectors affixed to said circuit board and said front card is coupled to said transition card via said plurality of connectors(Column 4, Lines 60-62).

17. Regarding claim 14, Bradley discloses a Compact Peripheral Component Interconnect (CPCI) system including a circuit board, said CPCI system comprising: first, second, third, fourth and fifth connectors affixed to said circuit board(Column 4, Lines 60-62); a front card coupled to

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a transition card via said third, fourth and fifth connectors(Column 4, Lines 63-65; Column 7, Lines 35-44); a Small Computer System Interface (SCSI) bus connected to said transition card(Column 4, Lines 28-30), said SCSI bus having a first end and a second end(It is inherent a bus has a first and second end); and an SCSI device connected to said first end of said SCSI bus(Column 4, Lines 40-44); and a first time-separated power domain provided to said first, second and third connectors(Column 5, Lines 28-29), said first and second connectors providing said first power domain to said front card and said third connector providing said first power domain to said transition card(Column 7, Lines 35-44);

Bradley does not specifically disclose a transition card that uses said first power domain to determine when to provide a termination at said second end of said SCSI bus. However, Liong discloses a switch automatically providing termination when a SCSI card at an end is disconnected(Column 4, Lines 52-62). Therefore, it would have been obvious to combine the teachings of Liong in the system of Bradley to provide a first power domain to determine when to provide a termination at said second end of said SCSI bus since this would allow devices in a SCSI chain to be disconnected without turning power off to the rest of the system(Column 3, Lines 20-27).

Liong further discloses a first power domain that can be provided to said transition card only when said front card is connected to said third connector(Column 4, Lines 52-56; FRU supplies 5 volts when connected and 0 volts when it is not connected). Therefore claim 14 is rejected.

18. Regarding claim 15, Liong disclose a system, wherein a second time-separated power domain is provided to said front card and said transition card(Column 4, Lines 52-56; The second power domain is less than 3.55 volts).

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19. Regarding claim 16, Bradley discloses a CPCI system, wherein said second power domain is provided to said transition card via said third, fourth and fifth connectors(Column 4, Lines 63-65; Column 7, Lines 35-44).

20. Regarding claim 17, Liong discloses a system, wherein during normal operation when said front card is connected with said system, said front card provides the termination at said second end of said SCSI bus and said transition card does not provide the termination(Column 5, Lines 17-25).

21. Regarding claim 18, Liong discloses a system, wherein during a period of when said front card is disconnected from said system, said transition card provides the termination at said second end of said SCSI bus(Column 4, Lines 52-62).

22. Regarding claim 19, Bradley discloses a method for implementing a hot swap on a Compact Peripheral Component Interconnect (CPCI) system, comprising the steps of: providing a first time-separated power domain to a front card(Column 5, Lines 28-29; Column 7, Lines 35-44).

Bradley does not specifically disclose a method for using said transition card to provide a termination at a Small Computer System Interface (SCSI) bus connected to said transition card only if said first time-separated power domain is not being provided to said transition card. However, Liong discloses a switch automatically providing termination when a SCSI card at an end is disconnected(Column 4, Lines 52-62). Therefore, it would have been obvious to combine the teachings of Liong in the system of Bradley to use said transition card to provide a termination at a Small Computer System Interface (SCSI) bus connected to said transition card only if said first time-separated power domain is not being provided to said transition card since this would allow devices in a SCSI chain to be disconnected without turning power off to the rest of the system(Column 3, Lines 20-27).



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Liong further discloses a method for providing said first time-separated power domain to a transition card only if said front card is coupled to said transition card(Column 4, Lines 52-56; FRU supplies 5 volts when connected and 0 volts when it is not connected) and using said front card to provide the termination at said SCSI bus if said first time separated power domain is being provided to said transition card(Column 5, Lines 17-25). Therefore claim 19 is rejected.

23. Regarding claim 20, Bradley discloses a method, wherein said front card is coupled to said transition card via a circuit board(Column 4, Lines 7-10).

24. Regarding claim 21, Bradley discloses a method, wherein said front card comprises first, second, third, fourth and fifth connectors(Column 4, Lines 60-62), and said front card is coupled to said transition card via said third, fourth and fifth connectors(Column 4, Lines 63-65; Column 7, Lines 35-44).

25. Regarding claim 22, Bradley discloses a method, wherein said first time-separated power domain is provided to said first, second and third connectors, said first and second connectors providing said first power domain to said front card and said third connector providing said power domain to said transition card(Column 4, Lines 63-65; Column 7, Lines 35-44).

26. Regarding claim 23, Bradley discloses a method, further comprising the step of providing a second time-separated power domain to said front card and said transition card(Column 4, Lines 52-56; The second power domain is less than 3.55 volts).

27. Regarding claim 24, Bradley discloses a method 24, wherein said SCSI bus has a first end and a second end(It is inherent a bus has a first and second end) and wherein said first end is connected to an SCSI device and said second end is connected to said transition card(Column 4, Lines 40-44).

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**Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The additional prior art further discloses art related to auto termination of a SCSI bus.

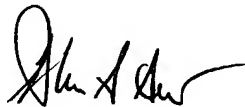
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nimesh G Patel whose telephone number is 703-305-7583. The examiner can normally be reached on M-F, 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark H Rinehart can be reached on 703-305-4815. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nimesh G Patel  
Examiner  
Art Unit 2112

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May 17, 2004

  
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